

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A computer system comprising: ~~a main system to execute an application in cooperation with a human user and a remote service system to evaluate problems in the main system;~~

[[the]] a main computer system comprising a database, an application server and a front-end server, wherein the main system executes an application in cooperation with a human user; and

[[the]] a remote service computer system for evaluating problems in the main system, comprising:

a service module ~~configured~~ to collect problem related data from the main system, said problem related data representing a problem identified about data in the main system;

an acquisition module ~~configured~~ to acquire knowledge representations;

a knowledge module ~~configured~~ to receive the knowledge representations and store the knowledge representations with sets of semantically grouped solution identification rules; and

an inference module ~~configured~~ to process problem related data with knowledge representations to identify solutions and forward the

solutions through the service module to the main computer system,  
wherein the inference module identifies the solutions by applying  
knowledge representations in at least one of a sequential order, a  
hierarchical order, and a dynamically adaptive order and wherein the  
identified solutions are applied to solve the problem identified in the main  
system.

2. (Original) The computer system of claim 1, wherein the main system and  
the service system communicate through remote function call connections provided by  
the service module.

3. (Original) The computer system of claim 1, wherein the service module  
monitors the application server and the database according to instructions from the  
inference module.

4. (Original) The computer system of claim 1, wherein the main system and  
the service system are systems in client/server configuration.

5. (Previously Presented) The computer system of claim 1, wherein the  
service system returns solutions that solve the problem directly in the main system.

6. (Previously Presented) The computer system of claim 1, wherein the  
service system returns solutions that solve the problem indirectly by being further

knowledge representations for a further inference module operating for the main system.

7. (Currently Amended) A method to evaluate problems in a main computer system that has a database, an application server, and a front-end server and that executes an application in cooperation with a human user, the method comprising the following steps:

collecting problem related data from the main system by a service module of a remote service system, said problem related data representing a problem identified about data in the main system;

acquiring knowledge representations by an acquisition module of the service system;

receiving the knowledge representations by a knowledge module;

storing the knowledge representations with sets of semantically grouped solution identification rules by the knowledge module of the service system;

processing problem related data with the knowledge representations by a inference module to identify solutions wherein the inference module identifies the solutions by applying knowledge representations in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order;

forwarding the solutions through the service module to the main system; and

applying the identified solutions to solve the problem identified in the main system by changing the state of memory in the main system.

8. (Previously Presented) The method of claim 7, wherein in the step of processing, the inference module performs an action selected from the group of:

- identify the solutions form set of predefined advices of the application,
- communicate questions to the user by composing the questions from predefined passages provided by the application, and
- analyses responses that the user enters in natural language.

9. (Original) The method of claim 8, wherein the service system forwards problem data and solutions for further analysis by a human technician.

10. (Original) The method of claim 8, wherein the service system forwards problem data and solutions to the further computer in a format that allows analysis by an expert system in the further computer.

11. (Original) A computer program product comprising program code means for performing all the steps of anyone of the claims 7-10 when the computer program product is run on a computer.

12. (Currently Amended) An inference module stored on a computer readable medium, that when executed on a processor, causes the processor to perform a method, the method comprising:

~~with expertise functionality for evaluating problems in a main computer system~~  
that executes an application, wherein:

the inference module ~~is adapted to process~~ processes problem related data with knowledge representations to identify solutions, said knowledge representations being stored with sets of semantically grouped solution identification rules, and

the inference module characterized in that the inference module is part of a service system receiving problem related data from the main computer system over a network, said problem related data representing a problem identified about data in the main system~~[[,]]; and~~

~~[[and]]~~ returning solutions to the main system, wherein in a first case, the service system returns solutions that solve the problem directly and, in a second case, the service system returns solutions that solve the problem indirectly by being further knowledge representations for a further inference module,

further wherein during the processing of problem related data, the inference module identifies the solutions by applying knowledge representations in at least one of a sequential order, a hierarchical order, and a dynamically adaptive order.

13. (Original) The computer system of claim 1, wherein the main system executes an enterprise resource planning application.

14. (Original) The computer system of claim 1, wherein the main system is implemented as an R/3 system.